
xFitter meeting

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Recent updates

- Gitlab image for continuous integration has been updated. All merge request need to merge “master” branch before tests can be run
- We may want to update the image again soon (it is based on rather old RedHat linux version), however official AL9 root image currently does not work with all dependences: better wait for updated image
- xFitter front page, <https://wiki-zeuthen.desy.de/xFitter>, is moved behind DESY firewall; the wiki system will be removed by the end of the year. Considering migrating it to gitlab wiki

https://gitlab.cern.ch/fitters/xfitter/-/wikis/Front

xFitter

Last edited by [Alexander Glazov](#) 2 hours ago

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Page was renamed from HERAFitter

Welcome to xFitter (former HERAFitter)



Proton parton distribution functions (PDFs) are essential for precision physics at the LHC and other hadron colliders. The determination of the PDFs is a complex endeavor involving several physics processes. The main process is lepton-proton deep-inelastic scattering (DIS), with data collected by the HERA ep collider, covering a large kinematic phase space needed to extract PDFs. Further processes (fixed-target DIS, pp-bar collisions, etc.) provide additional constraining powers for flavor separation. In particular, the precise measurements obtained from or yet to come from the LHC will continue to improve the knowledge of the PDF.

The xFitter project is an open-source QCD fit framework designed to extract PDFs and assess the impact of new data. The framework includes modules allowing for various theoretical and methodological options, capable of fitting a large number of relevant datasets from HERA, Tevatron, and LHC. This framework is already used in many analyses at the LHC.

Downloads of the xFitter software package

(!) xFitter-2.0.1 release is publicly available.

All the xFitter releases can be accessed [HERE](#).

Description: [arXiv:1410.4412](#)

xFitter Meetings



(!) xFitter Workshop at CERN 2-5 May 2023

(!) xFitter Workshop at Orsay 9-11 March 2022

(!) xFitter Workshop at DESY 26-28 February

(!) xFitter Workshop in Minsk 18-20 March 2019

- User's Meetings: meetings to enhance communication between users and developers (open access)
- Developer's Meeting: technical weekly meetings to ensure communication among developers (restricted access)
- Steering Group's Meeting: (restricted access)

xFitter Representation

- (!) Snowmass contribution
- List of results
- List of collected talks

– Asked IT to provide complete source for the wiki pages

– Converted front page with chatGPT: not perfect, but probably OK.